

Breeding Hazelnut Trees with Cold Hardiness

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*Hazelnut tree catkins at Hort Farm No. 3 in East Brunswick, NJ.
Photo taken December, 2015 by Tom Molnar, Rutgers NJAES.*

The Hybrid Hazelnut Consortium is committed to creating a leading research and breeding program to develop hazelnuts as a widely adapted, high-yielding, and low-input sustainable crop that is competitive with annual crops for food, feed, or bioenergy. The consortium is comprised of four organizations dedicated to this goal: the Arbor Day Foundation, Oregon State University, Rutgers University (New Jersey), and the Nebraska Forest Service/University of Nebraska-Lincoln.

“Breeding for cold hardiness is a big part of the hazelnut program, especially our national Hybrid Hazelnut Consortium project with goals to expand production,” notes Tom Molnar, Rutgers New Jersey Agricultural Experiment Station (NJAES). Dr. Molnar purposefully selects cold hardy varieties when choosing which hazelnut species to trial. He performs extensive research on hazelnut tree species from around the world and selects varieties to hybridize based on practical and desirable traits. Hybrids must include at least one parent species with durability and adaptation to cold environments in order to perform well in Northeast trials.

The primary goal of the Hybrid Hazelnut Consortium is to significantly expand the commercial production region of hazelnuts in the United States and Canada. This goal can be met by focusing research and breeding efforts on developing productive hazelnuts plants that express durable resistance to eastern filbert blight (EFB), a fungal disease in eastern North America, while also enhancing cold hardiness and drought tolerance.

Source: Hybrid Hazelnut Consortium, <https://www.arborday.org/programs/hazelnuts/consortium/>